

WHAT IS CLAIMED IS:

5/12/22

1. A system for sharing data between multiple consumers, comprising:

a first queue for storing data;

5 a plurality of consumers each sharing the data stored in the first queue; and

a scheduler for managing the storage of the data in the first queue and the consumption of the data in the first queue by each of the plurality of consumers.

10 2. The system of claim 1, further comprising a data source for outputting the data stored in the first queue, wherein the data output of the data source is controlled by the scheduler.

15 3. The system of claim 2, wherein the data source comprises a consumer that consumes data stored in a second queue.

4. The system of claim 2, wherein each of the plurality of consumers performs a registration process with the scheduler.

5. The system of claim 4, wherein the registration process between a consumer and the scheduler involves registering data requirements and priority requests of the consumer.

5 6. The system of claim 5, wherein the scheduler assigns each of the plurality of consumers to the first queue based on the registered data requirements.

10 7. The system of claim 2, wherein the scheduler maintains an IN pointer for the data source and one OUT pointer for each of the plurality of consumers to manage the flow of the data in and out of the first queue.

15 8. The system of claim 1, wherein the scheduler prioritizes data consumption of the first queue based on an amount of unread data of each of the plurality of consumers.

9. The system of claim 1, wherein the system is implemented in an embedded engine.

10. The system of claim 1, wherein the system is implemented in a telephony system.

11. The system of claim 1, wherein the first queue stores audio data output from an audio system.

12. The system of claim 1, wherein the first queue and the plurality of consumers are distributed over a network, and wherein the scheduler monitors data traffic over the network to manage and schedule data communication between the first queue and the plurality of consumers over the network.

13. The system of claim 1, wherein the system is dynamically re-programmed by one of the plurality of consumers or a new consumer.

14. The system of claim 1, wherein the system is dynamically re-programmed to include one of a conversational engine or a conversational function.

15. The system of claim 1, wherein the system is dynamically re-programmed by a procedural object.

16. A method for sharing data between multiple consumers, comprising the steps of:

storing data in a first queue;

sharing the data in the first queue between a plurality of consumers; and

managing the storage of the data in the first queue and the consumption of the data in the first queue by each of the plurality of consumers.

17. The method of claim 16, wherein the step of sharing comprises the steps of:

registering data requirements of each of the plurality of consumers; and

assigning the plurality of consumers to the first queue based on the registered data requirements.

18. The method of claim 17, wherein the step of registering further comprises registering priority requests by at least one of the plurality of consumers.

19. The method of claim 17, wherein the step of managing comprises the step of maintaining an IN pointer for data storage in the first queue and one OUT pointer for each

of the registered plurality of consumers to determine the amount of the data flow in and out of the first queue.

20. The method of claim 17, further comprising the step of prioritizing data consumption of the first queue based on an amount of unread data in the first queue of each of the plurality of consumers.

21. The method of claim 16, wherein the method is implemented in an embedded engine.

22. The method of claim 16, wherein the method is implemented in a telephony system.

23. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for sharing data between multiple consumers, the method comprising the steps of:

storing data in a first queue;
sharing the data in the first queue between a plurality of consumers; and
managing the storage of the data in the first queue and the consumption of the data in the first queue by each of the plurality of consumers.

24. The program storage device of claim 23, wherein the instructions for performing the step of sharing comprise instructions for performing the steps of:

5 registering data requirements of each of the plurality of consumers; and

assigning the plurality of consumers to the first queue based on the registered data requirements.

10 25. The program storage device of 24, wherein the instructions for performing the step of registering further comprise instructions for performing the step of registering priority requests by at least one of the plurality of consumers.

15 26. The program storage device of 24, wherein the instructions for performing the step of managing comprise instructions for performing the step of maintaining an IN pointer for data storage in the first queue and one OUT pointer for each of the registered plurality of consumers to determine the amount of the data flow in and out of the first queue.

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DISCUSSION